

# **US 29 PEDESTRIAN AND BIKE BRIDGE**

November 2, 2016

- 6:30 Introduction and Purpose**
- 6:40 Presentation on options**
- 7:10 Question and answers**
- 7:40 Review of boards with staff/consultants**

## **Feedback:**

**Presentation on line November 3, Office of Transportation website**

**Tonight in person, comment cards, or**

**E-mail to:**

**[dcookson@howardcountymd.gov](mailto:dcookson@howardcountymd.gov)**

**By November 14, 2016**

## **AGENDA**

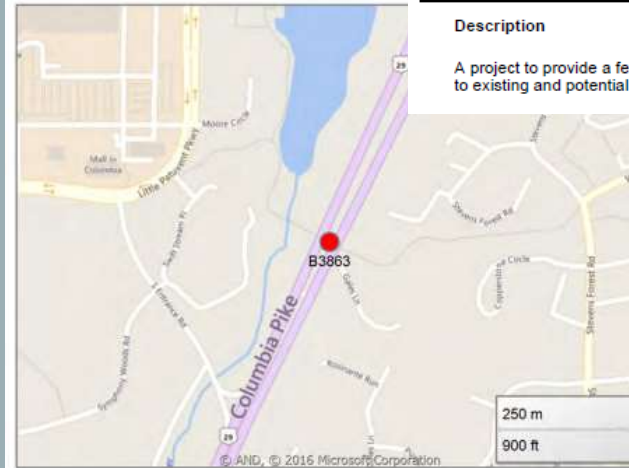
# CAPITAL PROJECT

## Fiscal 2017 Capital Budget

Project: B3863-FY2013 DOWNTOWN COLUMBIA-OAKLAND MILLS CONNECTION IMPROVEMENTS

## BRIDGE PROJECTS

Number: B3863



### Description

A project to provide a feasibility study, design and construction of enhancements to existing and potential future connections over US29.

### Operating Budget Impact

Annual Bond Redemption \$ \$42,750

## DOWNTOWN COLUMBIA PLAN A General Plan Amendment

Howard County, Maryland  
Adopted: February 2, 2013



## Howard County Maryland

Approved Capital Budget  
Fiscal Year 2017

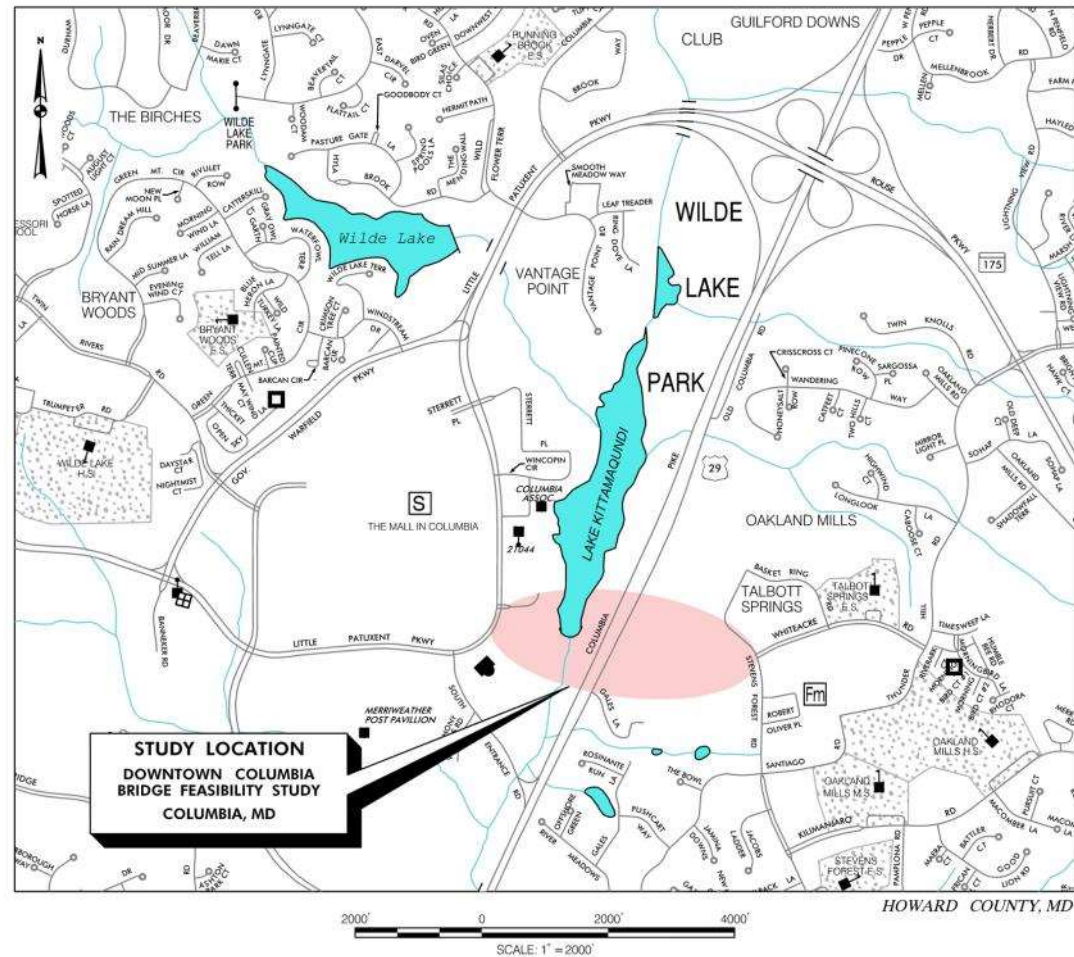


Allan H. Kittleman, County Executive

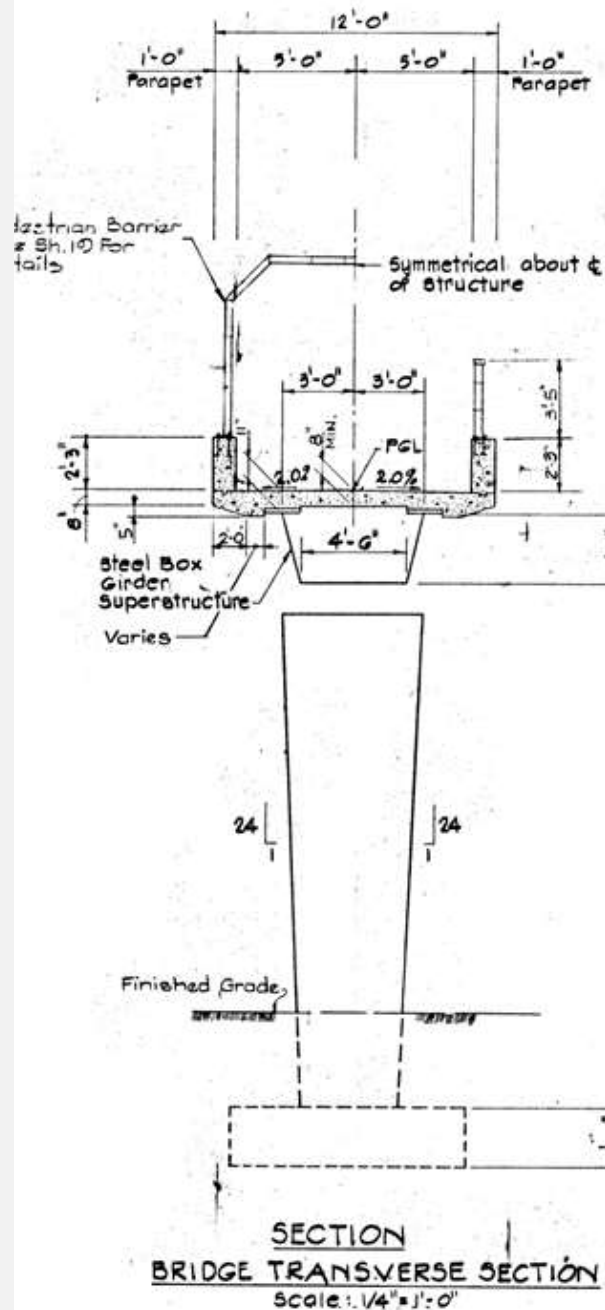


Above: Construction at Ilkandair Regional Park; top right: announcement of Maryland Route 32 expansion; bottom right: construction of new Wilde Lake Middle School.

# BRIDGE LOCATION







## EXISTING BRIDGE

## Description

## Six span bridge

## Single steel box girder system

## Concrete deck

679 feet length

## Condition

## Deck in good condition

## Parapet coating peeling in spots

Girder is in very good condition.  
Painted within 3 years

Substructure in very good condition





## EXISTING APPROACHES





## EXISTING APPROACHES

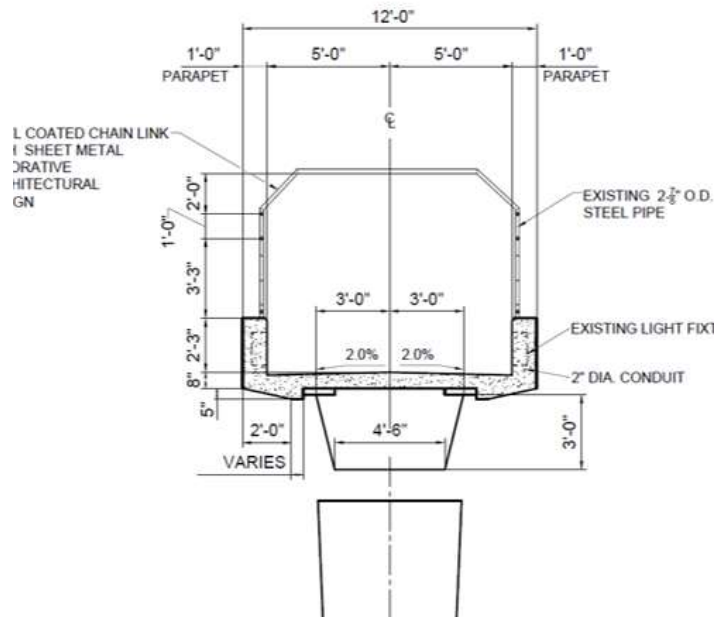




## ALTERNATES

- I Replace Fencing
- IA Replace Fencing and Cage
- 2 Geodesic Tube with Spiral
- 3 Space Frame

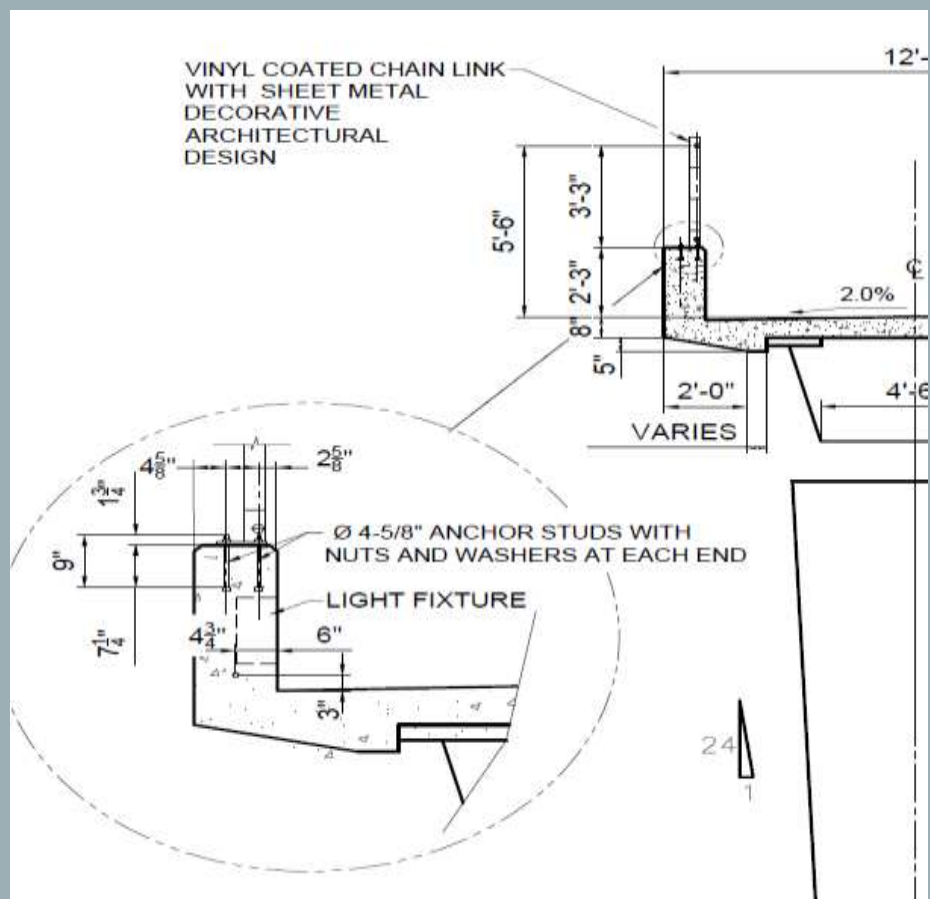




## ALTERNATE I REPLACE FENCING

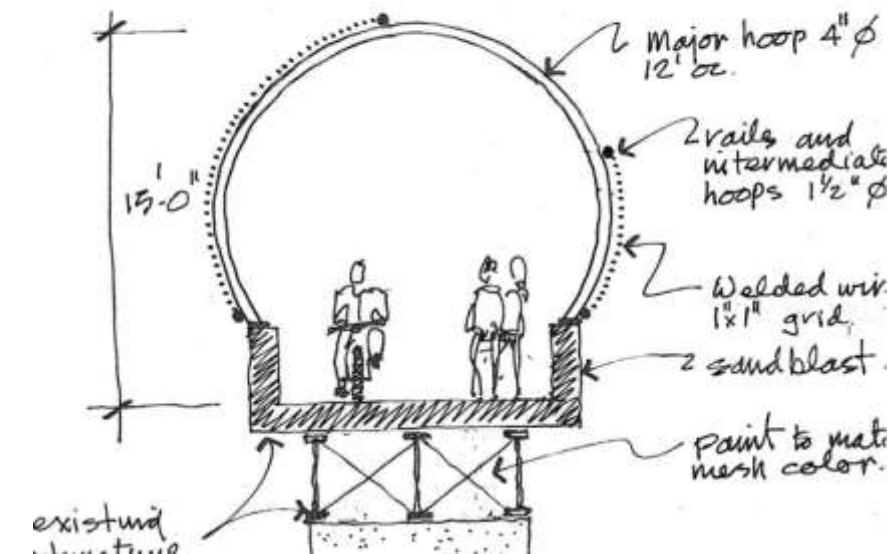
103

**Brown**

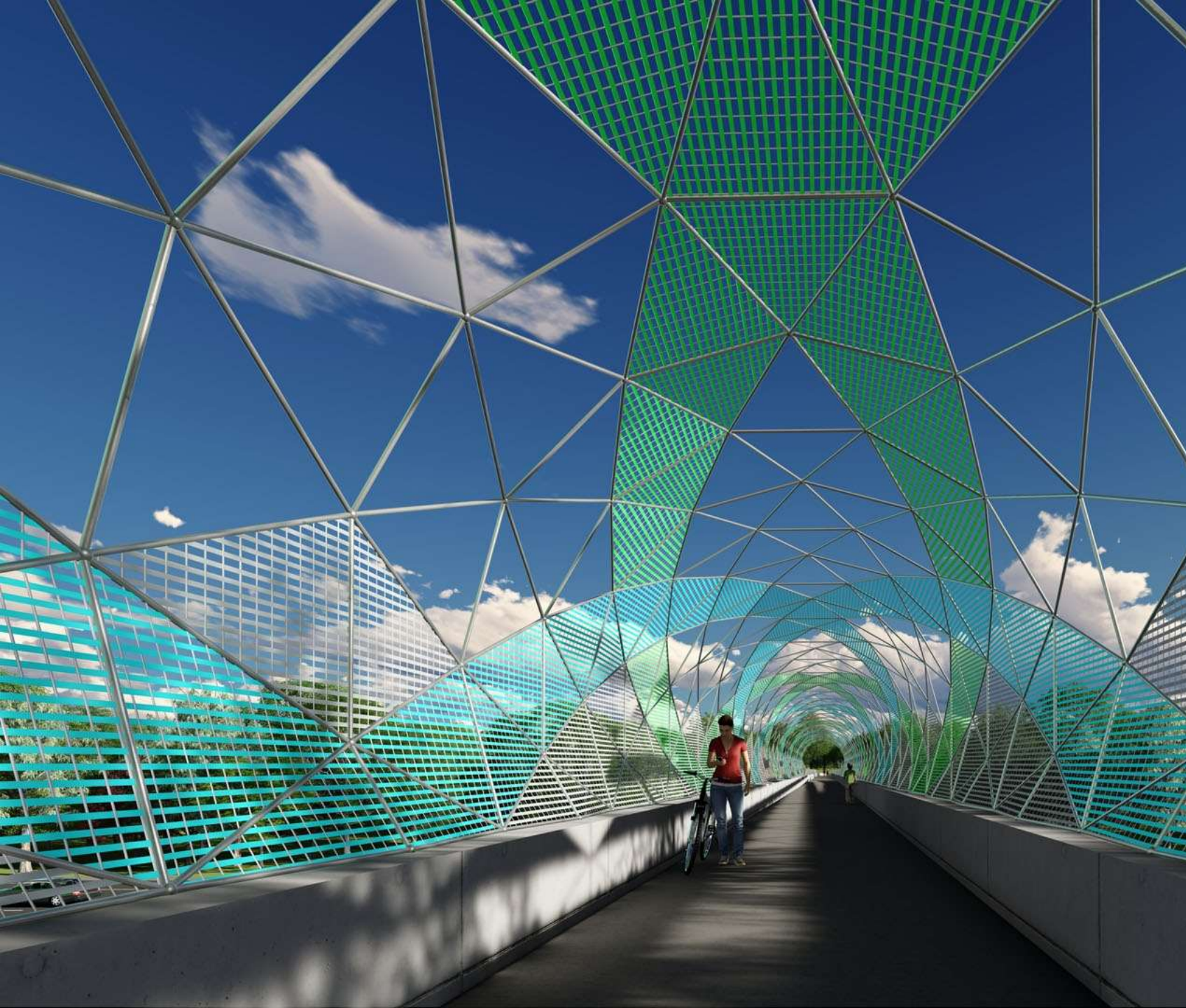


# ALTERNATE REPLACE FENCING





## ALTERNATE 1A – REPLACE FENCING AND CAGE



ALTERNATE 2  
GEODESIC TUBE  
WITH SPIRAL





ALTERNATE 2  
GEODESIC TUBE  
WITH SPIRAL





ALTERNATE 2  
GEODESIC TUBE  
WITH SPIRAL





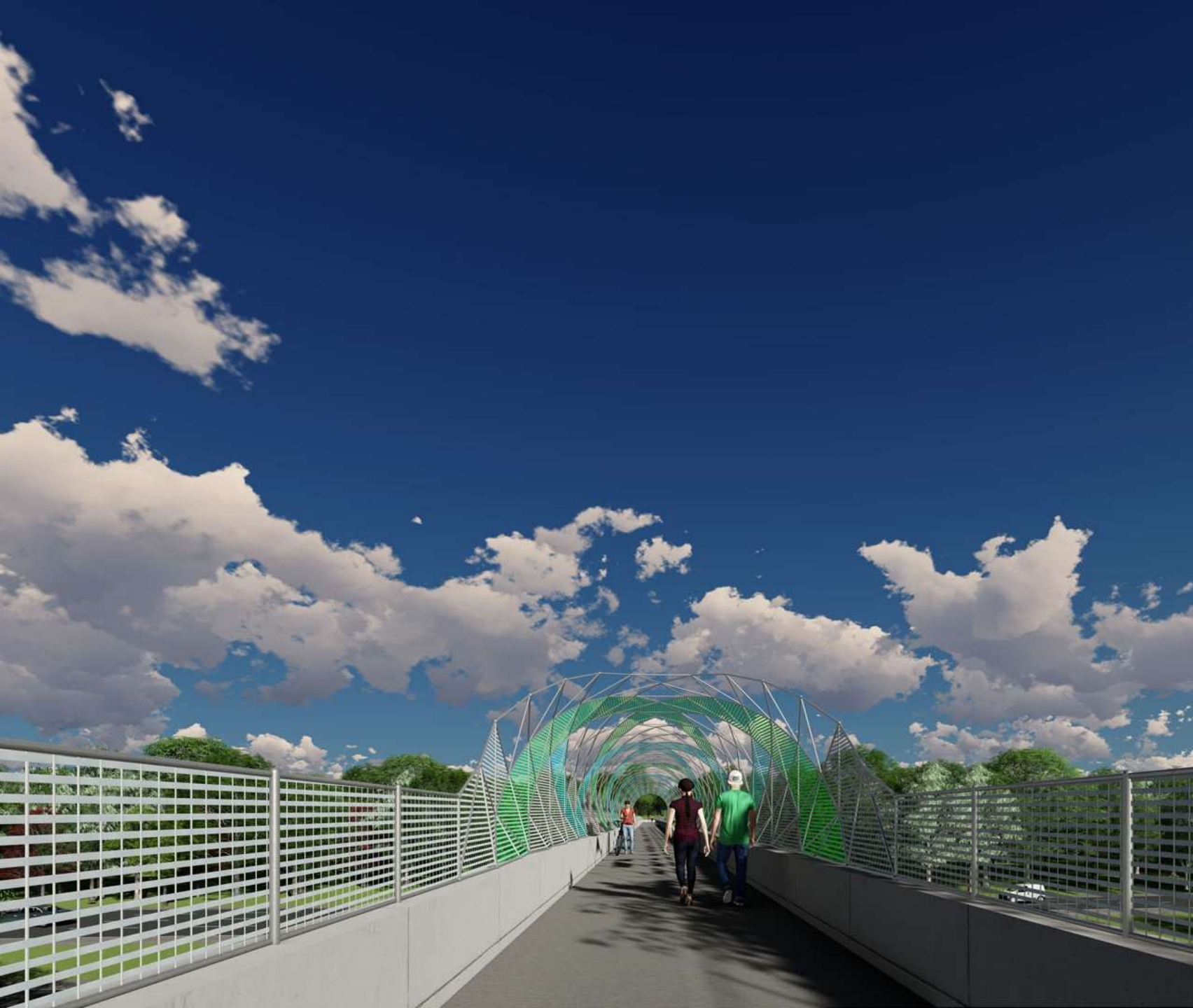
ALTERNATE 2  
GEODESIC TUBE  
WITH SPIRAL





ALTERNATE 2  
GEODESIC TUBE  
WITH SPIRAL





## ALTERNATE 2 GEODESIC TUBE WITH SPIRAL



ALTERNATE 2  
GEODESIC TUBE  
WITH SPIRAL



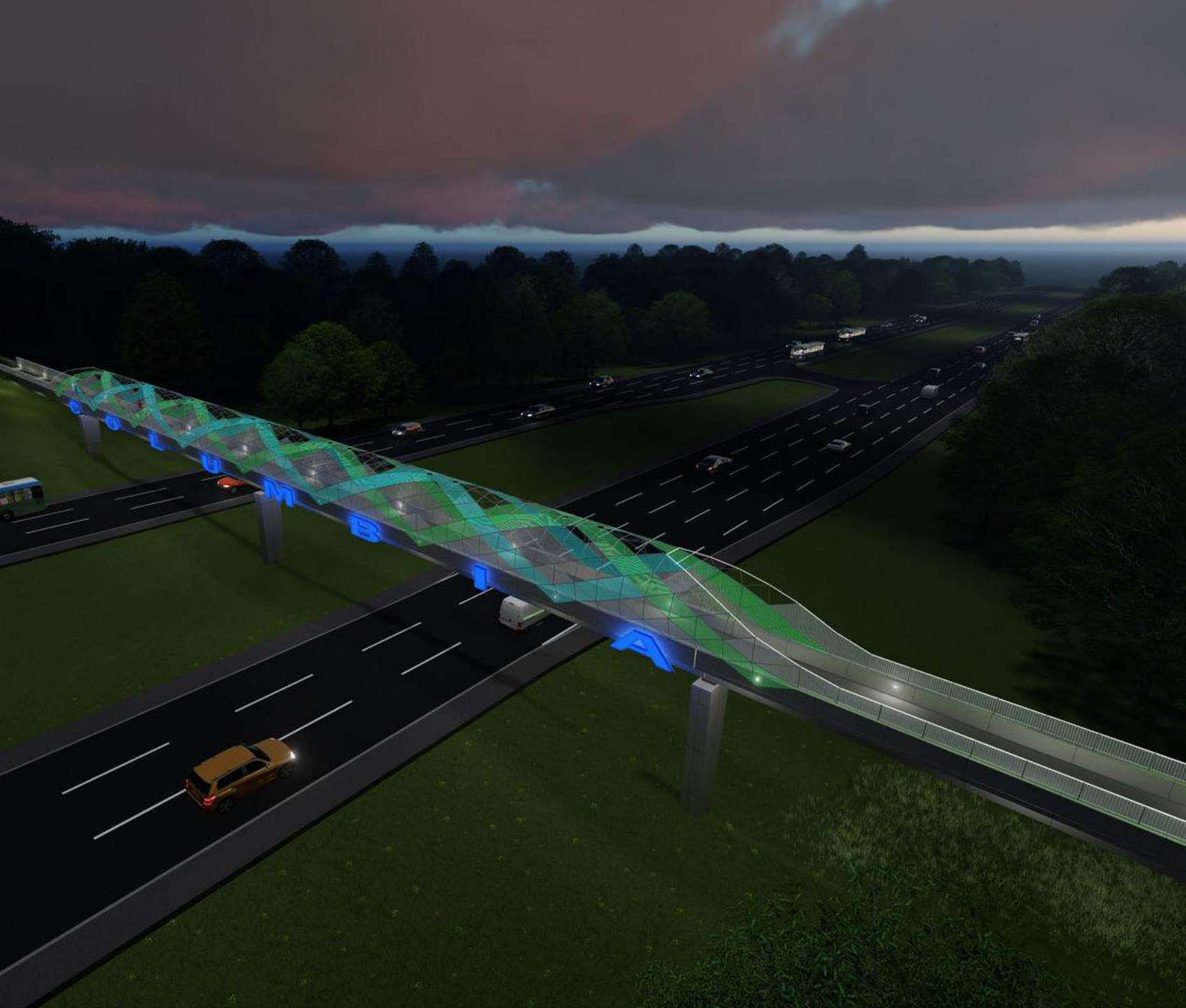


ALTERNATE 2  
GEODESIC TUBE  
WITH SPIRAL

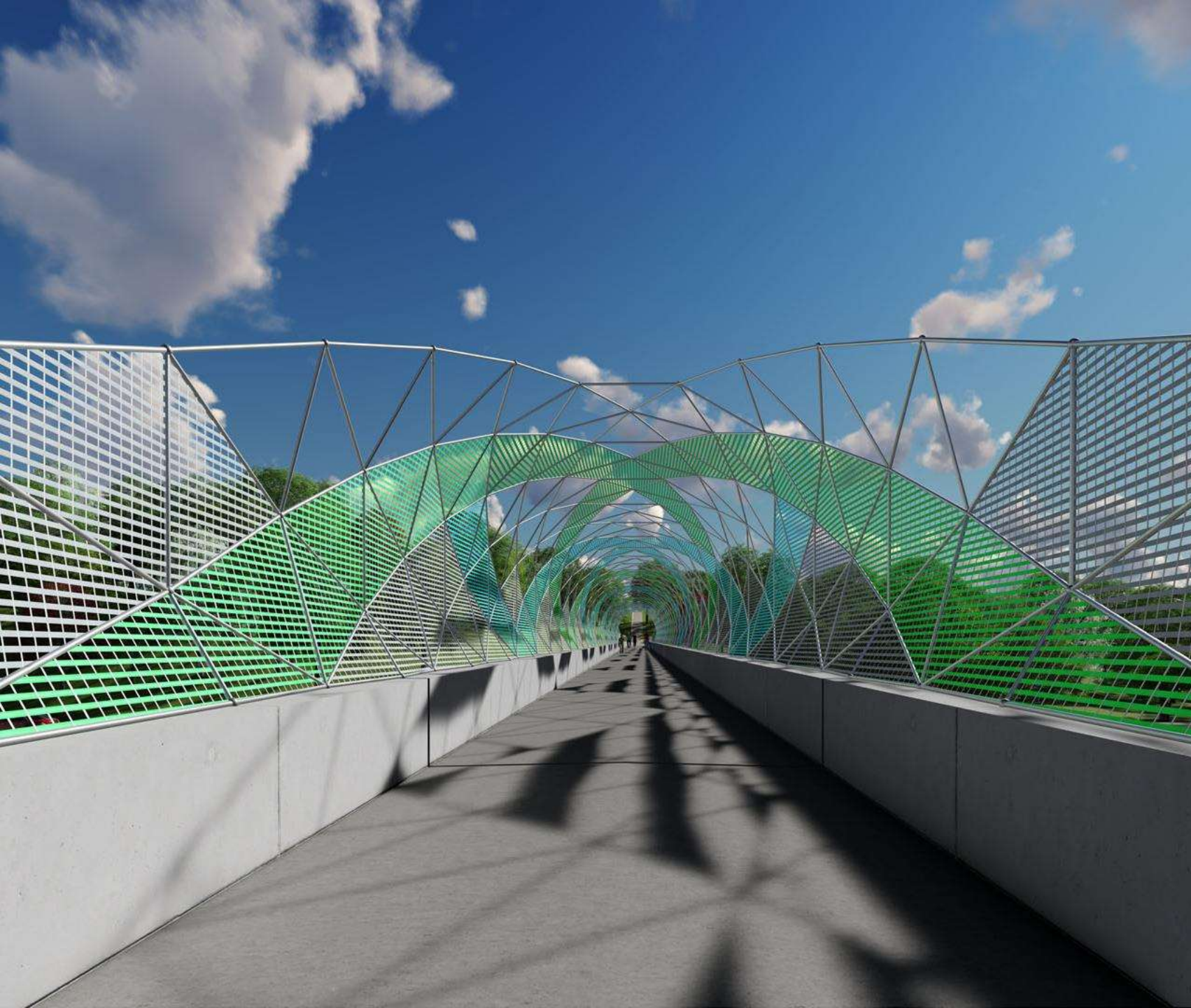


ALTERNATE 2  
GEODESIC TUBE  
WITH SPIRAL





ALTERNATE 2  
GEODESIC TUBE  
WITH SPIRAL



ALTERNATE 2  
GEODESIC TUBE  
WITH SPIRAL





ALTERNATE 3  
SPACE FRAME





ALTERNATE 3  
SPACE FRAME





ALTERNATE 3  
SPACE FRAME



ALTERNATE 3  
SPACE FRAME





ALTERNATE 3  
SPACE FRAME



ALTERNATE 3  
SPACE FRAME





ALTERNATE 3  
SPACE FRAME



ALTERNATE 3  
SPACE FRAME



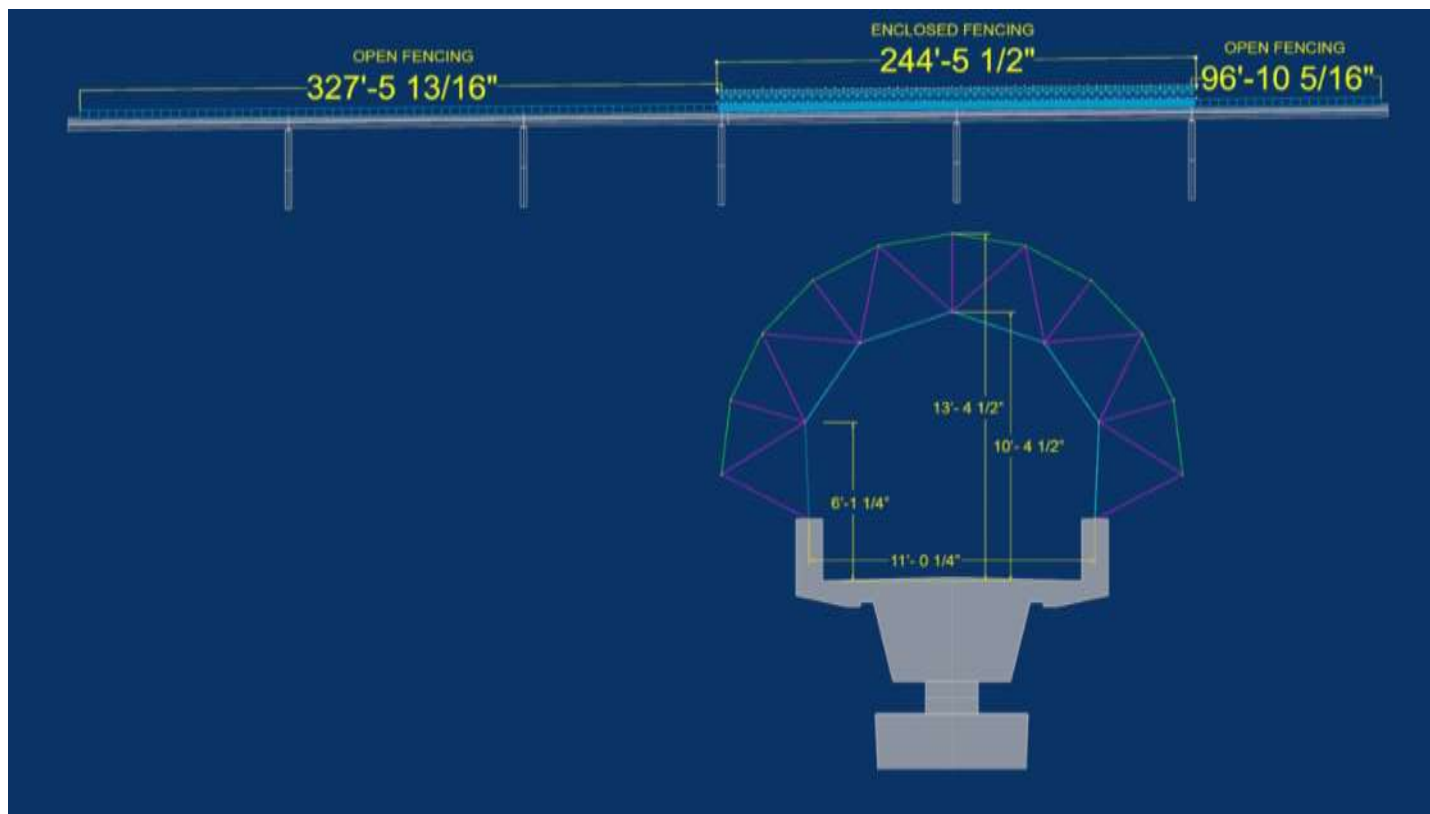


ALTERNATE 3  
SPACE FRAME



ALTERNATE 3  
SPACE FRAME





ALTERNATE 3  
SPACE FRAME

# SUMMARY OF COSTS

Alternate No. / Description	Bridge Retrofit Cost	Lighting	‘Columbia’ letters each side of bridge	Fiber Optic Cost for Cameras	Anti-Graffiti Coating (inside parapets only	Engineering/Design and Contingency (25%)	Total
0. No Build	\$ ---	\$ ---	0	\$ ---	\$ ---	\$ ---	\$ ---
1. Replace Fencing	\$77,000	\$71,000	\$82,000	\$50,000	\$17,250	\$75,000	\$375,000
1A. Replace Framing and Fencing	\$334,000	\$94,000				\$145,000	\$725,000
2. Geodesic Tube with Spiral	\$734,000	\$101,000				\$245,000	\$1,225,000
3. Space Frame	\$965,000	\$108,000				\$305,000	\$1,525,000



## COMMENTS AND FEEDBACK

- Feedback:
- Presentation on line November 3, Office of Transportation website
- Tonight in person, comment cards, or E-mail to:  
[dcookson@howardcountymd.gov](mailto:dcookson@howardcountymd.gov)
- By November 11, 2016